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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,693	08/30/2003	Peter Volpa	0412-P03261US0	3489
110 7590 03/12/2008 DANN, DORIMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307				
EXAMINER LU, TOM Y				
ART UNIT 2624		PAPER NUMBER		
MAIL DATE 03/12/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/653,693

**Applicant(s)**

VOLPA, PETER

**Examiner**

Tom Y. Lu

**Art Unit**

2624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7, 12, 20, 25-28, 31, 34 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8-11, 18, 19, 21-24, 29, 30, 32, 33, 35-38, 42 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/27/04: 3/12/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The references cited in the Search Reports filed 02/27/2004 and 03/12/2004 have been considered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1, 2, 7, 15, 16, 17, 20, 28, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao Kong Chow et al ("Chow" hereafter) (U.S. Patent No. 3,096,506) in view of Jowers et al ("Jowers" hereafter) (U.S. Patent No. 4,126,779).
    - a. As per claim 1, Chow discloses a method for identifying an unknown MICR character on a document (column 1, lines 9-11, and column 3, lines 28-29, Chow discloses an apparatus for character recognition on a check. The examiner notes the unknown character will be one of the ten decimal digits and four coding symbols, column 3, lines 15-16, and an example of "0" is given in figure 3 as reference. The examiner further notes the apparatus carries out the functional steps of the claimed method), comprising the steps of: providing a document (a check, column 3, lines 28-29), wherein the document has an unknown MICR character printed with magnetic ink (column 3, lines 29-30); imparting a magnetic charge onto the magnetic ink to magnetize the unknown character (column 2,

lines 65-68, the magnetic field imparts magnetic charges onto the magnetic ink to magnetize the characters); scanning the unknown character with a magnetic read head to obtain a set of data indicative of the unknown character (a read head scans the characters to obtain electrical signal of the characters, column 2, lines 68-70 and column 3, lines 1-10. The examiner notes the electrical signal is constructed to a waveform for each character, and the characteristics of the waveform as described at column 3, lines 23-26 is the claimed "a set of data indicative"); providing a plurality of predetermined data sets wherein each data set corresponds to a particular MICR character (column 3, lines 64-68, each correlation network 20 stores a data set/waveform characteristics that correspond to a particular MICR character); determining a correlation value of the similarity between each of the predetermined data sets and the data set for the unknown character using cross correlation (column 4, lines 37-48, cross correlation computation takes place between the input signal of character "0" and each of the correlation network, and the outputs of the correlations are the claimed "correlation values"); identifying the maximum correlation value (the output of correlation between input signal of character "0" and the correlation network "0" is the greatest, column 4, lines 40-42 and columns 5, lines 15-25); and identifying the unknown character as the MICR character corresponding to the data set having the maximum correlation value (column 5, lines 34-38 and column 13, lines 1-6, the input signal of character "0" is recognized with largest output value). However, Chow does not explicitly state the document was placed within an envelope and an extracting

step is required to extract the document from the envelope. Nonetheless, Chow does teach his invention is to be practiced in the area of check clearing (column 1, lines 26-33). And Jowers at column 1, lines 5-35, teaches it is a custom practice in remittance that a check and a transaction document come in a mail envelope, and the check and the transaction document are extracted out from the envelope to perform check clearing process. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to adopt Chow's invention in the area of check clearing as suggested by Chow and such check clearing practice would include an envelope extraction step for extracting the check as taught in Jowers because it is a custom practice to do so.

- b. As per claim 2, Chow discloses wherein the step of determining a correlation value using cross correlation comprises the step of determining the sum of the cross product between each of the predetermined data sets and the data set for the unknown character (column 4, line 35, the equation is a representation of sum of the cross product between functions  $f_1$  and  $f_2$ ,  $f_1$  is the claimed "unknown character" and  $f_2$  is one of the predetermined data sets).
- c. As per claim 7, Chow discloses wherein the step of scanning comprises conveying the document past the magnetic read head and measuring the magnetic field strength as the document passes the read head (column 2, lines 68-70 and column 3, lines 1-10).
- d. As per claim 15, Chow discloses wherein each cross correlation in the step of determining a correlation value comprises cross correlating the data set for the

unknown character and one of the predetermined data sets by determining the product of each data point in the data set for the unknown character with the corresponding data point in the one predetermined data set and summing the products (column 4, line 35).

- e. As per claim 16, see explanation in claim 1.
  - f. As per claim 17, see explanation in claim 2.
  - g. As per claim 20, see explanation in claim 7.
  - h. As per claim 28, see explanation in claim 15.
  - i. As per claim 31, see explanation in claim 1.
  - j. As per claim 34, see explanation in claim 7.
3. Claims 12-14, 25-27 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow and Jowers as applied to claims 1, 16 and 31 above, and further in view of Hayduchok et al ("Hayduchok" hereinafter) (U.S. Patent No. 6,311,846 B1).
- a. As per claim 12, the combination of Chow and Jowers does not teach obtaining a set of optical image data corresponding to the document, and exporting the optical image data and data regarding the identified MICR character to a data file for the document. Hayduchok teaches such features at column 10, lines 26-67 and column 11, lines 1-38. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to recognize MICR character recognition method/system is applicable in the field of document processing and one would be motivated to do so because Hayduchok suggests such MICR recognition is a part of his system, column 12, lines 6-8.

- b. As per claim 13, the combination of Chow and Jower does not teach determining the orientation of the document and selectively re-orienting the document. Hayduchok teaches such feature at column 10, lines 62-65. The motivation is provided in claim 12 above.
- c. As per claim 14, see column 10, lines 65-67 and column 11, lines 1-4.
- d. As per claim 25, see explanation in claim 12.
- e. As per claim 26, see explanation in claim 13.
- f. As per claim 27, see explanation in claim 14.
- g. As per claim 39, see explanation in claim 12.
- h. As per claim 40, see explanation in claim 13.
- i. As per claim 41, see explanation in claim 14.

***Allowable Subject Matter***

- 4. Claims 3-6, 8-11, 18, 19, 21-24, 29-30, 32, 33, 35-38, 42 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

- 5. **Examiner note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teaching for the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references

in entirety as potential teaching all or part of the claimed invention, as well as the context of the a passage as taught by the prior art or disclosed by the examiner.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571) 272-7393. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571)-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom Y Lu/  
Art Unit 2624



